



CITY OF DULUTH

Community Resources Department

Planning Division

411 W 1st St, Rm 402 * Duluth, Minnesota 55802-1197

Phone: 218/730.5580 Fax: 218/730.5904

STAFF REPORT

File Number	10113	Contact	Kyle Deming, kdeming@duluthmn.gov	
Application Type	MU-I Plan Review	Planning Commission Date	12-14-2010	
Deadline for Action	Application Date	11-02-2010	60 Days	01-01-2011
	Date Extension Letter Mailed	11-22-2010	120 Days	03-02-2011
Location of Subject	Northwest corner of 10th Ave. E. and Second St. (East Hillside)			
Applicant	St. Luke's Hospital - Pat Earley	Contact	218-249-5664, pearley@slhduluth.com	
Agent		Contact		
Legal Description	Lots 13-16, Block 55, Portland Division			
Neighbor Letter Date	11-22-2010, sign also posted	Number of Neighbor Letters Sent	21	

Proposal

Construct oxygen storage tanks, electric power transformers, and a 17 stall parking lot to serve St. Luke's hospital and clinic. Please see the attached description of the facilities.

This staff report is based on the 12/3/2010 plan set. The applicant has indicated that a new set of plans will be available 12/10 that address several of the short-comings of the current plan set. Staff will review the 12/10/2010 plan set and will provide it to the Planning Commission with a cover memo to indicate any adjustments to the final recommendations that may be needed.

	Current Zoning	Existing Land Use	Future Land Use Map Designation
Subject	MU-I	Apartment buildings	Medical District
North	MU-N	Homes	Medical District
South	MU-I	St. Luke's Hospital	Medical District
East	R-2	Homes/Apartments	Medical District
West	MU-N	Apartments	Medical District

Summary of Code Requirements (reference section with a brief description):

Sec. 50-15.4.D.3: Applicants that do not opt for approval of a district plan shall obtain separate approval for each development a project through the full development review procedures in Article 5. Procedure includes sign and mailed notices, public hearing, and approval by Planning Commission (Sec. 50-37.11). Projects to be approved if the design complies with all applicable provisions of the Chapter including review of vehicle circulation and building scale, without reference to a district plan.

Purpose statement for the MU-I district (Sec. 50-15.4): The MU-I district is established to provide for the unique development needs and impacts of major medical, educational and research institutional development. The intent is to give institutional landowners the flexibility to plan and develop their facilities while ensuring that surrounding neighborhoods are protected from adverse impacts, such as traffic, overshadowing buildings, noise, and unexpected expansion of institutional uses into residential areas.

Dimensional Standards (Table 50-15.4-1):

Setbacks (minimum): 0' for all structures and parking facilities.

Building height (maximum) for this site: 66'

III C 1

Comprehensive Plan Findings (Governing Principle and/or Policies) and Current History (if applicable):

The Comprehensive Plan defines "Medical District" as an area encompassing the medical campuses and adjacent areas that support them, with related commercial, office uses and residential uses in the fringe areas of the district.

- Density increasing from fringe to taller buildings in core,
- Form-based guidelines to transition between core and fringe, preserve viewsheds,
- Pedestrian-oriented design, transit facilities, and parking,
- Relationship to institutional master plans.

On Oct. 12, 2010 the Planning Commission approved the determination that the oxygen storage and electric power transformer facilities are related to and supportive of the other medical uses (FN 10099).

On Nov. 22, 2010, the City Council approved rezoning (FN 10101) the site of the oxygen tanks and electrical transformers to MC - Medical Center zoning, which converted to MU-I - Mixed Use-Institutional zoning in the UDC.

Discussion (use numbered or bullet points; summarize and attach department, agency and citizen comments):

Findings of Fact:

- 1) The electric power transformers and oxygen storage tanks were determined by the Planning Commission to be facilities related to and supportive of medical uses and, therefore, are permitted on this site with no use specific standards (Sec. 50-20).
- 2) Sec. 50-23 - Connectivity and Circulation: Applicant is providing a pedestrian connection to the public sidewalk on 2nd St.
- 3) Sec. 50-24 - Parking and Loading: Parking lot meets all dimensional requirements, including snow storage space.
- 4) Sec. 50-25 - Landscaping and Tree Preservation: Landscape plan complies in all areas except for the following: (1) street frontage landscaping required on 2nd St. Applicant asserts, but has not provided evidence, that safety requirements prohibit landscaping within 25' of the oxygen tanks and spacing requirements don't allow for relocation of plant materials in that frontage area. If applicant provides technical evidence to support this, the Land Use Supervisor may approve adjustment (Sec. 50-25.2.J). (2) Concern that the required 6' vegetative screening (Sec. 50-25.4.B and Sec. 50-25.5.B) will not reach the required 75% opacity at the one-year mark given info. on the Arbor Day web page. Will require site review at 1 year mark to verify.
- 5) Sec. 50-26 - Screening, Walls, and Fences: Design meets requirements except for the following: Screening for the oxygen tanks and evaporators is not tall enough to completely screen the equipment (Sec. 50-26.2.B.2). Applicant has provided an 8' tall fence to match other fences on site. Building official will need to approve this variation (Sec. 50-26.4.D).
- 6) Sec. 50-27 - Signs: Applicant will need to apply separately for a permit for the sign near the parking lot entrance (Sec. 50-37.13).
- 7) Sec. 50-28 - Storm Water Drainage and Erosion Control: Applicant will need to apply separately for these permits (50-37.13).
- 8) Sec. 50-29 - Sustainability Standards: Not applicable, structures not greater than 10,000 sf. (Sec. 50-29.1).
- 9) Sec. 50-30 - Design Standards: Not applicable, structures not greater than 10,000 sf. (Sec. 50-30.2.A.1(c)).
- 10) Sec. 50-31 - Exterior Lighting: Applicant has not provided a Lighting Plan, but did provide details on the pole-mounted parking lot luminaries to be used. Applicant has been given until 12/13/2010 to provide the Lighting Plan.
- 11) Comments: E-mail, 12/6/2010, Tom Johnson, City Engineering, storm water design has not been submitted yet (attached).

Staff Recommendation (include Planning Commission findings, i.e., recommend to approve):

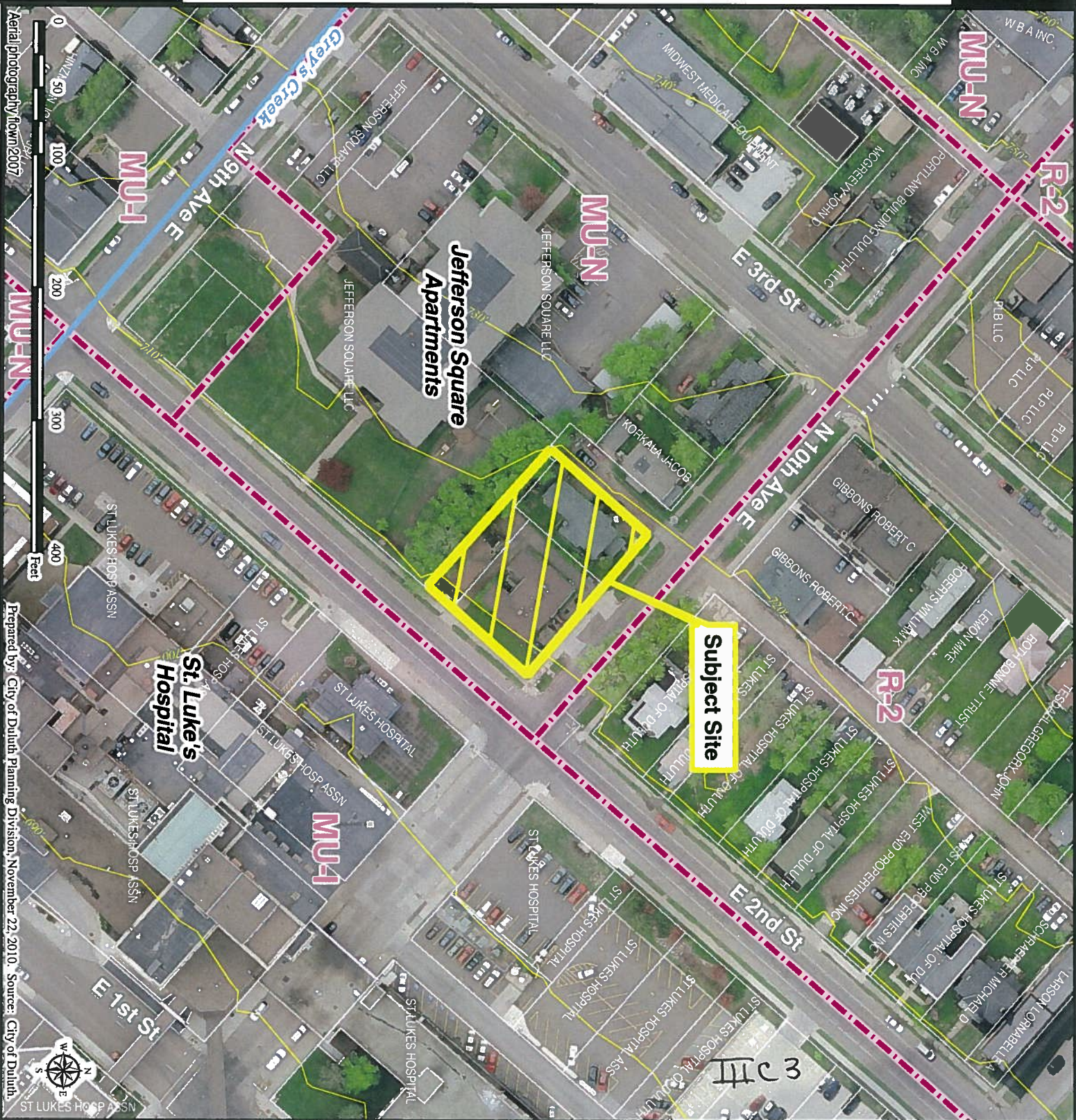
Because the 12/3/2010 plans are lacking (1) documentation of the need for flexibility in applying the street frontage landscape requirements for 2nd Street and (2) a complete Lighting Plan, staff recommends the MU-I plan review be tabled unless these deficiencies are cured before the Planning Commission meeting. If the deficiencies are cured, staff's recommendation is:

Approve the MU-I plan, subject to the following conditions:

- 1) The project be limited to, constructed, and maintained according to the documents submitted by DSGW Architects titled "St. Luke's Hospital Utilities Services Relocation," dated 12/3/2010, Sheets T.1, C1.0, C2.0, L1.0, A1.0, A2.0, A3.0.
- 2) Land Use Supervisor approves adjustment of 2nd Street frontage landscaping, per Sec. 50-25.2.J.
- 3) Building official approves variation in the screening height for tanks, as allowed by Sec. 50-26.4.D.
- 4) Building official approves the sign permit, per Sec. 50-37.13.
- 5) Engineering and Building official approves the storm water permit and erosion controls, per Sec. 50-37.13.
- 6) Any alterations to the approved plans that do not alter major elements of the plan may be approved by the Land Use Supervisor without further Planning Commission; however, no such administrative approval shall constitute a variance from the provisions of Chapter 50.

III C2

Attachments (aerial photo with zoning; future land use map; site plan; copies of correspondence)





























FN 10113

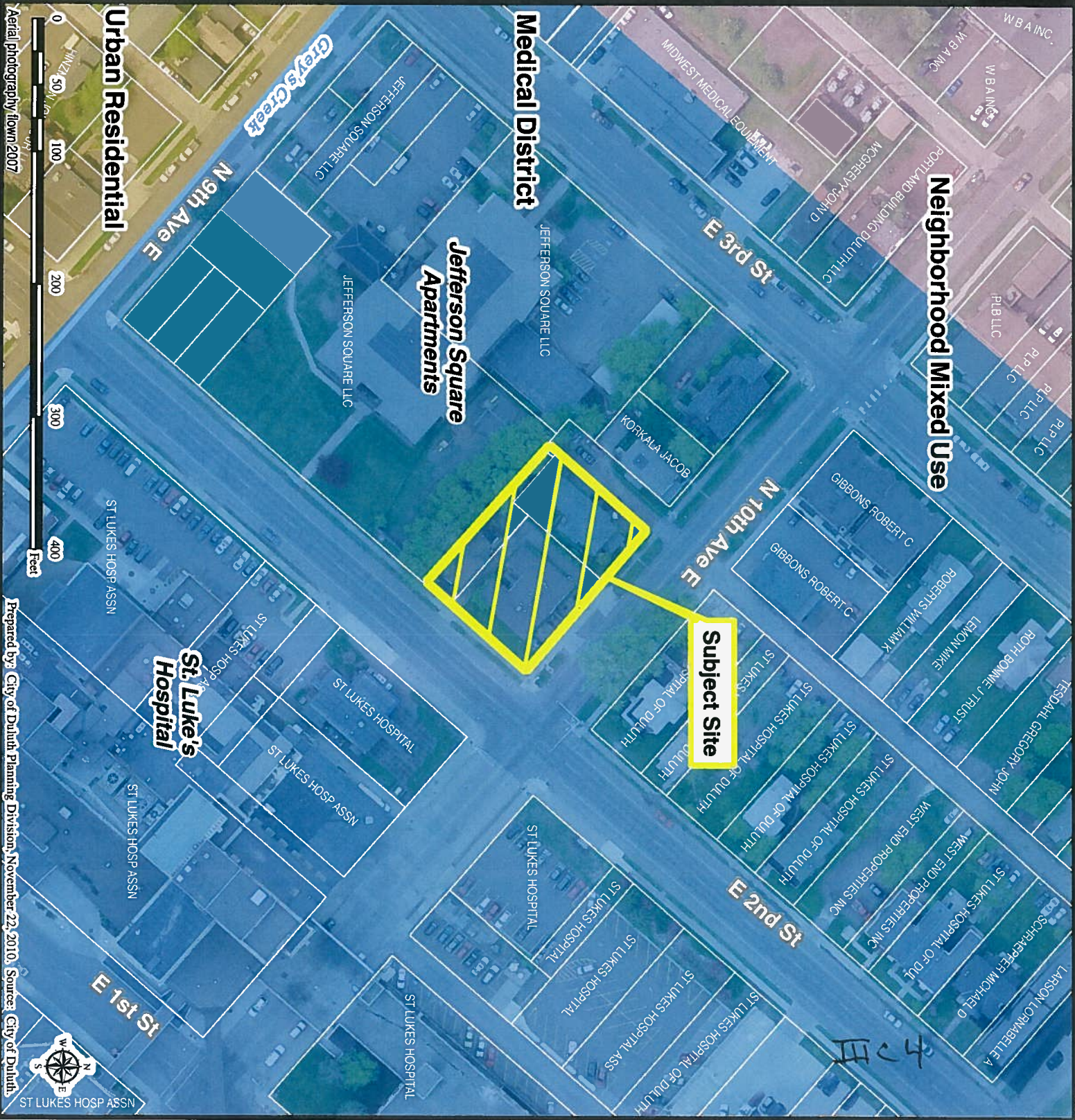
MU-1 Plan Review

St. Luke's Hospital

Legend

-  Trout Stream (GPS)
-  Other Stream (GPS)
-  Sensitive Lands Overlay
-  Future Land Use
-  Preservation
-  Recreation
-  Rural Residential
-  Low-density Neighborhood
-  Traditional Neighborhood
-  Urban Residential
-  Neighborhood Commercial
-  Neighborhood Mixed Use
-  General Mixed Use
-  Central Business Secondary
-  Central Business Primary
-  Auto Oriented Commercial
-  Large-scale Commercial
-  Business Park
-  Tourism/Entertainment District
-  Medical District
-  Institutional
-  Commercial Waterfront
-  Industrial Waterfront
-  Light Industrial
-  General Industrial
-  Transportation and Utilities

The City of Duluth has tried to ensure that the information contained in this map or electronic document is accurate. The City of Duluth makes no warranty or guarantee concerning the accuracy or reliability. This drawing/data is neither a legally recorded map nor a survey and is not intended to be used as one. The drawing/data is a compilation of records, information and data located in various City, County and State offices and other sources affecting the area shown and is to be used for reference purposes only. The City of Duluth shall not be liable for errors contained within this data provided or for any damages in connection with the use of this information contained within.



St. Luke's Hospital
Planning & Zoning Application Attachment
10/31/10

Street Location of Property:

925 E. 2nd Street, 205 N. 10th Ave. East, & 211 N. 10th Ave. East

Legal Description of Property:

Tax Parcels 010-3080-07840, 07850, 07880

Lots 13 thru 16, Block 55, Portland Division, Duluth

Proposed Request:

- 1) MU-I zone district Plan Review per Section 50-37.11 of the UDC for construction of oxygen system/tanks and electrical distribution facilities and secondarily including additional medical district parking spaces on the remainder of the parcel.

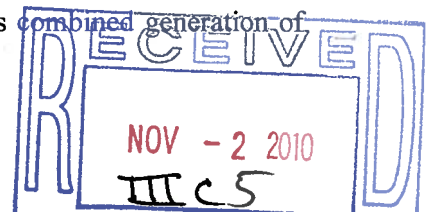
Project Description: (Drawings attached)

The current electrical distribution infrastructure serving St. Luke's Hospital is 20 years old and normal planning is requiring replacement. In addition, Minnesota Power is changing voltage of its primary distribution feeder that will make the existing of electrical equipment (transformers/switches) obsolete and un-useful. The old equipment must be in operation during construction of a new arrangement thus requiring a different site. The identified location of the equipment was spotted at location that allows connection to Minnesota's power's high voltage line running down 10th Avenue East and provides for more access space for Minnesota Power to resolve any equipment malfunction in a manner without hindrance of site constrictions. The new site better ensures this new equipment in not in the way of future access by patients, staff and emergency vehicles or of any future expansion of the adjacent hospital or clinic building.

An existing patient oxygen supply system serves the St. Luke's campus patients with oxygen needed for medical treatment. It consists of supply tanks located on a lot across from the hospital building and piping that crosses 10th avenue to the hospital. Oxygen is delivered to the tanks by an oxygen supplier and piped to the patient bedside. The current hospital oxygen supply system is over 20 years old. St. Luke's has been advised by its oxygen supplier that the existing equipment requires replacement due to its age and the existing site is inadequate for new equipment. A thorough review of the St. Luke's campus by the oxygen supply company and St. Luke's facilities staff has been made in an effort to find an adequate new site. Several factors were considered, including: the safety of off loading product, physical separation requirements between the hospital/MRI/clinic building, the need to preserve parking adjacent to the hospital for special access, the aesthetics and screening a opportunities, and the need to be sure new equipment is not in the way of future patient hospital access needs. The proposed site, across 2nd Street from the hospital, provides the best location to serve the campus in the future considering those factors.

Both the electrical and oxygen facility have been spotted in the particular location on this parcel for these reasons:

- 1) alignment of equipment with Minnesota power's feeders and the existing established underground street crossing,
- 2) oxygen tank fire codes require specific distances from wood buildings
- 3) the oxygen transport truck needs to be level to transfer liquid oxygen to the tank
- 4) St. Luke's does not have a heating plant it relies on the Duluth steam utility
- 5) on this site, land area and a particular order has to be preserved for future construction of a heating plant should it become necessary for the hospital produce heat for itself. Preserved space would be used for parking until then.
- 6) flexibility in applying future energy conservation opportunities such as combined generation of power and heat.

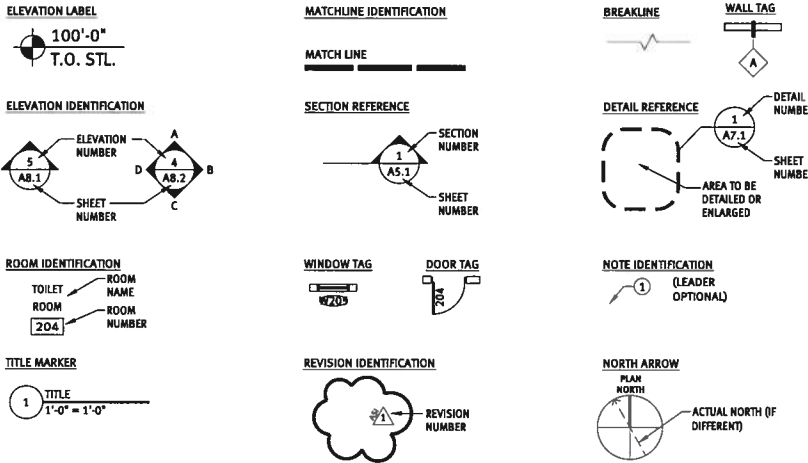


ST. LUKE'S HOSPITAL UTILITIES SERVICES RELOCATION

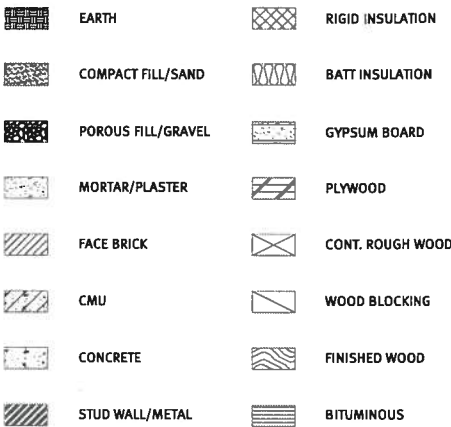
95% CHECK SET CONSTRUCTION DOCUMENTS

DULUTH, MN

SYMBOLS



MATERIALS



DESIGN TEAM

ARCHITECT
DSGW ARCHITECTS
2 WEST FIRST STREET SUITE 201
DULUTH, MINNESOTA 55802
PHONE: 218-727-2626
FAX: 218-722-7467
CONTACT: REBECCA J. LEWIS, AIA, ACHA
E-MAIL: RLEWIS@DSGW.COM

STRUCTURAL CONSULTANT
NORTHLAND CONSULTING ENGINEERS
114 SOUTH 20TH AVENUE WEST
DULUTH, MN 55806
PHONE: 218-727-5995
FAX: 218-727-7779
CONTACT: MARK UDD
E-MAIL: MARK@NCE-DULUTH.COM

CIVIL CONSULTANT
BOCHT ENGINEERING, INC
102 SOUTH 21ST AVE. WEST, SUITE 4
DULUTH, MN 55802
PHONE: 218-349-8070
FAX: 218-727-3798
CONTACT: BRYAN BOCHT, PE
E-MAIL: BOCHTENGINEERING@MSN.COM

SHEET INDEX

TITLE SHEET

T.1 TITLE SHEET

CIVIL

C1.0 LAYOUT PLAN
C2.0 GRADING PLAN

LANDSCAPING

L1.0 LANDSCAPE PLAN

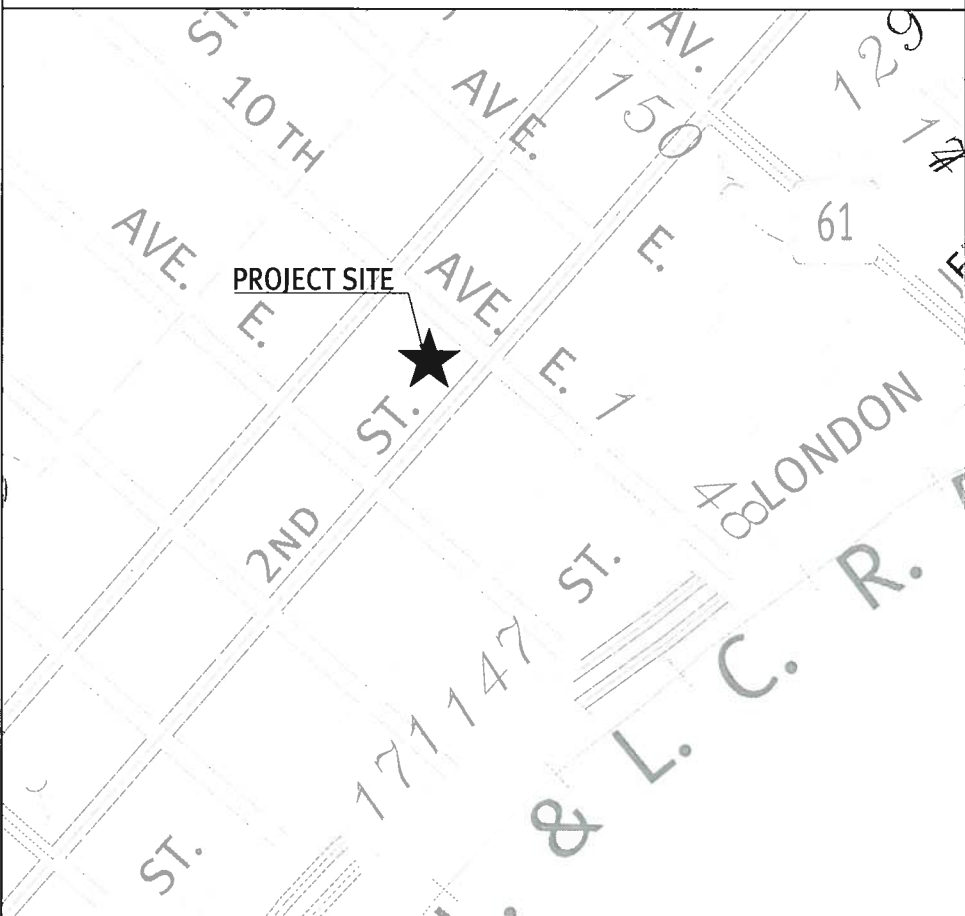
ARCHITECTURAL

A1.0 ARCHITECTURAL SITE PLAN
A2.0 ELEVATIONS
A3.0 SECTIONS AND DETAILS

STRUCTURAL

S1.0 GENERAL NOTES/SHEET INDEX
S1.1 TYPICAL CONCRETE SECTION/DETAIL
S2.1 FOUNDATION PLAN & ELEVATED SLAB FRAMING PLAN
S3.1 SECTIONS/DETAILS

LOCATION MAP



CODE ANALYSIS

PROJECT: ST. LUKE'S HOSPITAL UTILITIES SERVICES RELOCATION
N. 10TH AVE AND E 2ND AVE
DULUTH, MN

ARCHITECT: REBECCA J. LEWIS, AIA, ACHA
PREPARED BY: JESSICA M. DERYNCK
CODE USED: 2006 IBC, NFPA, UDC
OCCUPANCY GROUP(S): U

OCCUPANCY SEPARATIONS REQ.: N/A
TYPE OF CONSTRUCTION: N/A
IS THE BUILDING SPRINKLED: N/A
OCCUPANT LOAD: N/A

NOTES:
1. HANDICAPPED PARKING NOT REQUIRED ON SITE PROVIDED REQUIRED SPACES ARE ACCOUNTED FOR ON CAMPUS.
2.

ST. LUKE'S HOSPITAL UTILITIES SERVICES RELOCATION

N 10TH AVE. AND E 2ND STREET
DULUTH, MN

project # 010127.00
date DECEMBER 3, 2010
file name 010127.00-T.1 TITLE SHEET

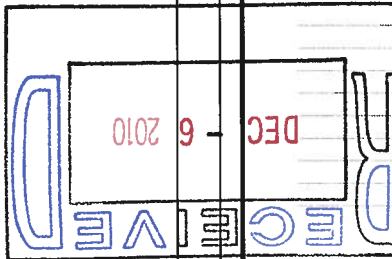
drawn by JMD
checked by RJL
name ---
reg. # ---
sign date DECEMBER 3, 2010

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the State of Minnesota.

signature

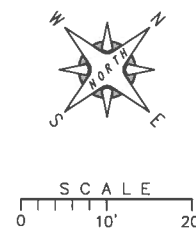
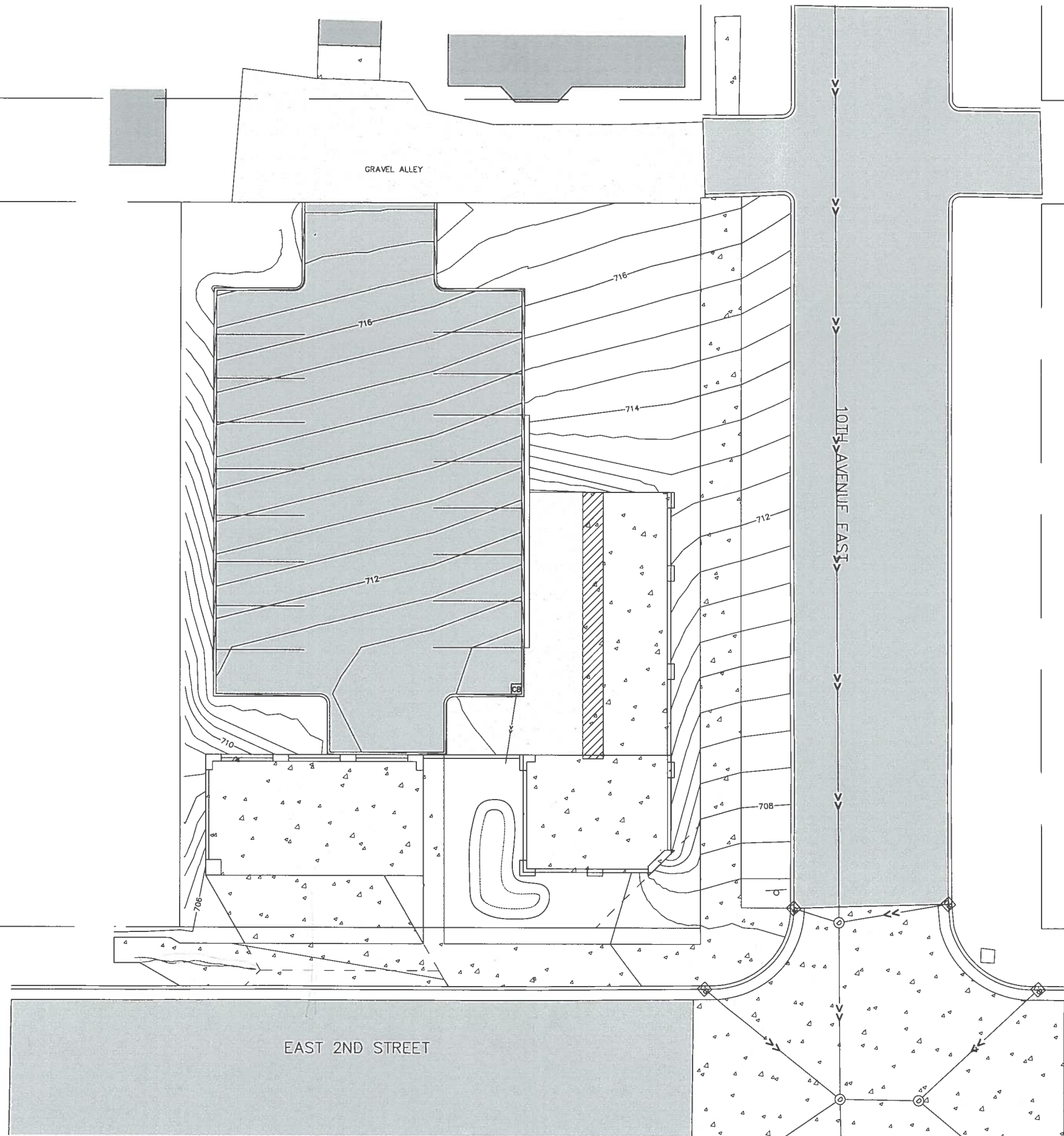
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DECEMBER 3, 2010

mark revision/issue date



sheet title
sheet number
TITLE SHEET
T.1

III C6



St Luke's Utility Services Relocation

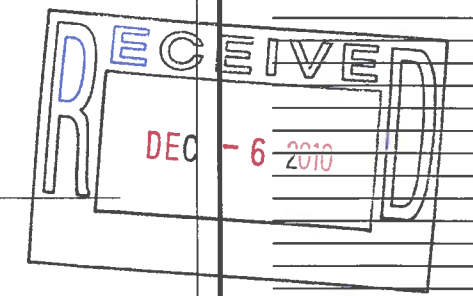
N 10th Ave. East Second Street
 Duluth, MN

project # 10-28
 date DECEMBER 3, 2010
 file name _____
 drawn by _____
 checked by _____
 name BRYAN BOCHT
 reg. # 25124
 sign date DECEMBER 3, 2010

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the State of Minnesota.

signature _____
BE BOCHT ENGINEERING, PA
 102 SOUTH 21ST AVENUE WEST, SUITE 4
 DULUTH, MN 55805
 218.341-8279 PHONE
 218.727.2786 FAX

Preliminary Not For Construction
 December 3, 2010
 mark revision/issue _____ date _____



GRADING
 PLAN
 sheet title
 sheet number
C2.0

III C7



N 10th Ave. East Second Street
Duluth, MN

project # 10-28
date DECEMBER 3, 2010
file name _____
drawn by _____
checked by _____
name BRYAN BOCHT
reg. # 25124
sign date DECEMBER 3, 2010

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signature _____

BOCHT ENGINEERING, PA
122 SOUTH 21ST AVENUE WEST, SUITE 4
DULUTH, MN 55806
218.349-8870 PHONE
218.727-5798 FAX

Preliminary Not For Construction
December 3, 2010

mark revision / issue date[illegible]

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LAYOUT
PLAN
sheet
title
sheet
number
C1.0

IIIc 8

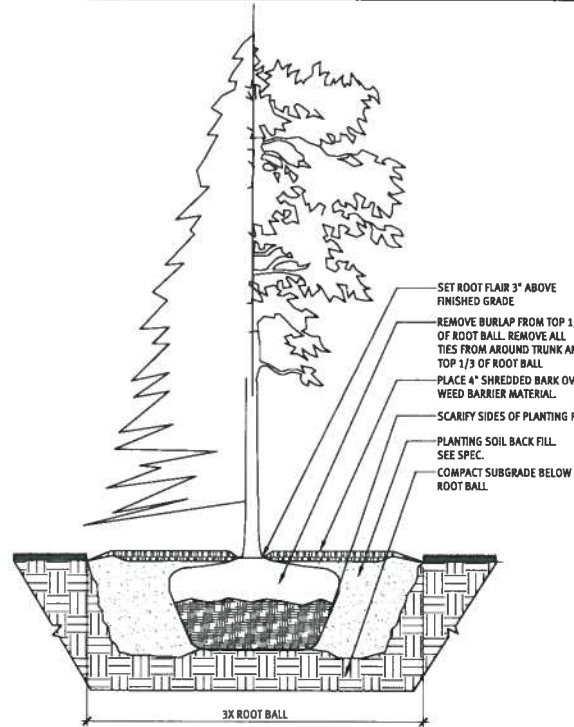
SITE LANDSCAPE NOTES:

1. PLANT MATERIALS SHALL BE FROM THE CITY OF DULUTH'S APPROVED LANDSCAPING PLANT LIST AS SHOWN IN THE UDC APPLICATION MANUAL. ALL PLANT MATERIAL SHALL BE HARDY TO NORTHEAST MINNESOTA, SUITABLE FOR THE SITE, FREE OF DISEASE AND INSECTS AND CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK OF THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
2. ALL EXISTING VEGETATION SHALL BE PROTECTED DURING CONSTRUCTION THROUGH USE OF A FENCE AROUND AN AREA SUFFICIENT TO PROTECT THE HEALTH OF THE VEGETATION, AND SHALL BE INCORPORATED INTO THE LANDSCAPE PLAN WHEREVER POSSIBLE.
3. ALL REQUIRED LANDSCAPING SHALL BE PLANTED IN UNCOMPACTED SOIL WITH A MINIMUM DEPTH OF 2 FT.
4. IF INSTALLATION OF REQUIRED LANDSCAPING IS NOT POSSIBLE BY THE TIME CONSTRUCTION ON THE PARKING LOT HAS BEEN COMPLETED, THE CITY MAY AUTHORIZE A DELAY IN INSTALLATION UNTIL NO LATER THAN JUNE 30, 2011. AS A CONDITION OF AUTHORIZING A DELAY IN INSTALLATION, THE CITY OF DULUTH MAY REQUIRE THAT A SURETY OR OTHER GUARANTEE, IN A FORM ACCEPTABLE TO THE CITY OF DULUTH, IN THE ESTIMATED AMOUNT OF SUCH INSTALLATION BE PROVIDED, OR THE CITY OF DULUTH MAY ISSUE A TEMPORARY CERTIFICATE OF OCCUPANCY, WITH THE PERMANENT CERTIFICATE OF OCCUPANCY TO BE ISSUED FOLLOWING INSTALLATION OF ALL REQUIRED LANDSCAPING.
5. PLANT MATERIALS SHALL NOT BE PLACED CLOSER THAN 4 FT. FROM ANY FENCE LINE OR PROPERTY LINE.

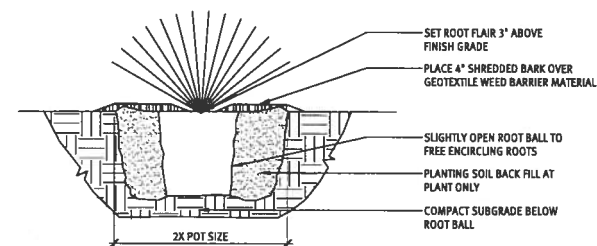
SITE LANDSCAPE REQUIREMENTS:

- A. MINIMUM LIVING MATERIAL IS 63.5%
- B. 20FT SITE LINE TRIANGLE
- C. 15 FT. IN FRONT STREET YARD
- D. 10 FT. IN SIDE STREET YARD
- H. 5 FT. ON REAR LOT LINES
- I. LOT SIZE IS 14037 SQFT. = 5 FT LANDSCAPE FRONTAGE MIN
- J. 1 TREE PER 35 FT. OF LINEAR FRONTAGE (NOT MET ON 2ND STREET)
- K. 3 LARGE SHRUBS PER 25 FT. OF LINEAR FRONTAGE.
- L. 3 SMALL SHRUBS PER 25 FT. OF LINEAR FRONTAGE
- M. 5 FT. MINIMUM PERIMETER SCREENING FROM PUBLIC STREET (VEGETATION NOT MET ON 2ND STREET)
- N. CONTINUOUS SCREENING FENCE AT LEAST 6 FT. TALL SHALL BE PROVIDED BETWEEN THE PARKING LOT AND THE RESIDENTIAL ZONE OR USE DESIGNATED SNOW STORAGE AREA
- O. TOTAL PARKING LOT AREA 6374 SQFT. X 15% = 956 SQFT. REQUIRED INTERNAL LANDSCAPE.
- P. PROVIDED 958 SQFT. OF INTERNAL LANDSCAPE AREA
- Q. PROVIDED 958 SQFT. OF INTERNAL LANDSCAPE AREA /300 SQFT= 3.1 TREES. 4 TREES PROVIDED = 34% PARKING LOT COVERAGE

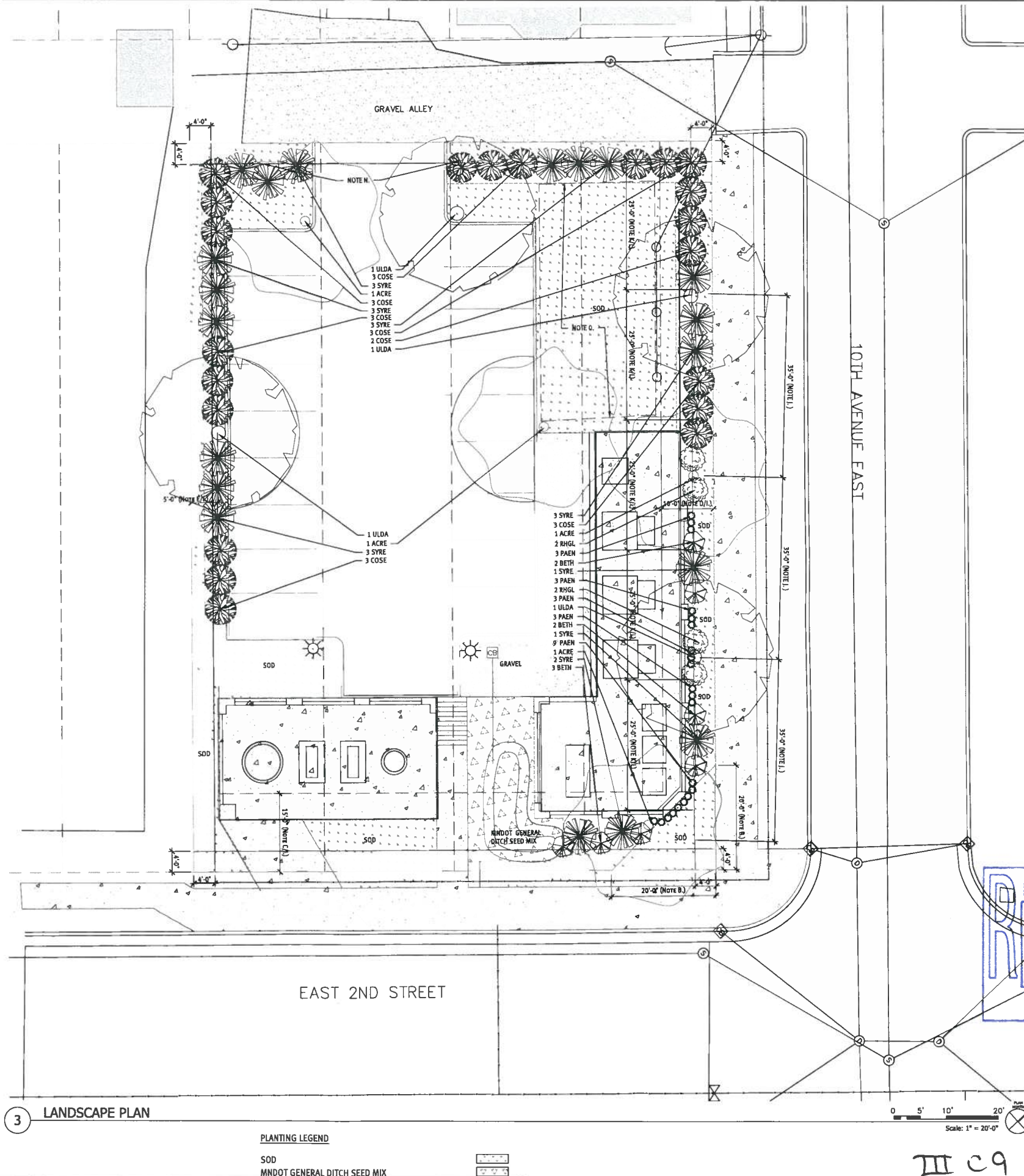
CODE	SCIENTIFIC NAME	COMMON NAME	QNTY	SIZE	NOTES
ACRE	ACER RUBRUM	RED MAPLE	3	3" CAL	B&B
ULDA	ULMUS DAVIDIANA VAR JAPONICA 'DISCOVERY'	DISCOVERY ELM	4	1.5" CAL	B&B
SYRE	SYRINGA VULGARIS	COMMON PURPLE LILAC	21	5 GAL	6" O.C.
COSE	CORNUS SERICEA	RED OSIER DOGWOOD	20	5 GAL	6" O.C.
RHGL	RHUS GLABRA	SMOOTH SUMAC	4	5 GAL	5" O.C.
BETH	BERBERIS THUNBERGII (AUTOPURPUREA)	JAPANESE RED BARBERRY	7	5 GAL	3" O.C.
PAEN	PARTHENOCISSUS QUINQUEFOLIA VAR. ENGELMANNII	ENGELMANN VY	21	1 GAL	1.5" O.C.



1 EVERGREEN & DECIDUOUS TREE B&B PLANTING DETAIL
1/4" = 1'-0"



2 CONTAINERIZED SHRUB AND PERENNIAL PLANTING DETAIL
1/2" = 1'-0"



ST LUKES HOSPITAL OXYGEN AND UTILITIES RELOCATION

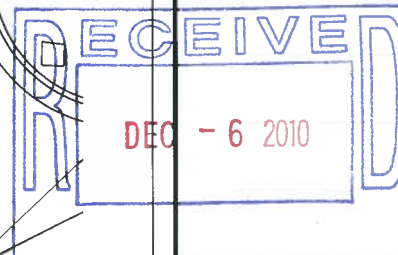
project # 010127.00
date DECEMBER 3, 2010
file name 010127.00-L1.0 LANDSCAPE PLAN
drawn by -
checked by -
name PATRICIA STINNETT
reg. # 48524
sign date DECEMBER 3, 2010

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the State of Minnesota.

signature

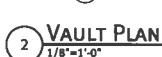
**PRELIMINARY NOT FOR
CONSTRUCTION
DECEMBER 3, 2010**

mark revision/issue date



LANDSCAPE PLAN
sheet title
sheet number
L1.0

III c9



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architecture

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ST. LUKE'S HOSPITAL UTILITIES SERVICES RELOCATION

N 10TH AVE. AND E 2ND STREET
DULUTH, MN

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project # 010127.00
date DECEMBER 3, 2010
file name 010127.00-A1.0
ARCHITECTURAL SITE PLAN
drawn by -
checked by -
name ----
reg. # ----
sign date DECEMBER 3, 2010

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signature

mark revision/argue d

PRELIMINARY NOT FOR
CONSTRUCTION
DECEMBER 3, 2010

ARCHITECTURAL
SITE PLAN

sheet	
title	
sheet	
number	

A1.0

ST. LUKE'S HOSPITAL UTILITIES SERVICES RELOCATION

N 10TH AVE. AND E 2ND STREET
DULUTH, MN

project # 010127.00
date DECEMBER 3, 2010
file name 010127.00-A2.0 ELEVATIONS

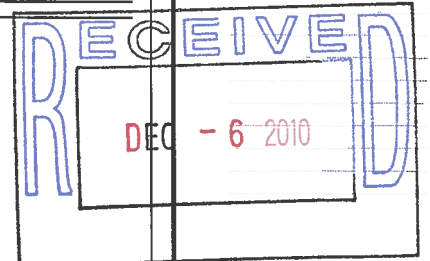
drawn by -
checked by -
name -
reg. # -
sign date DECEMBER 3, 2010

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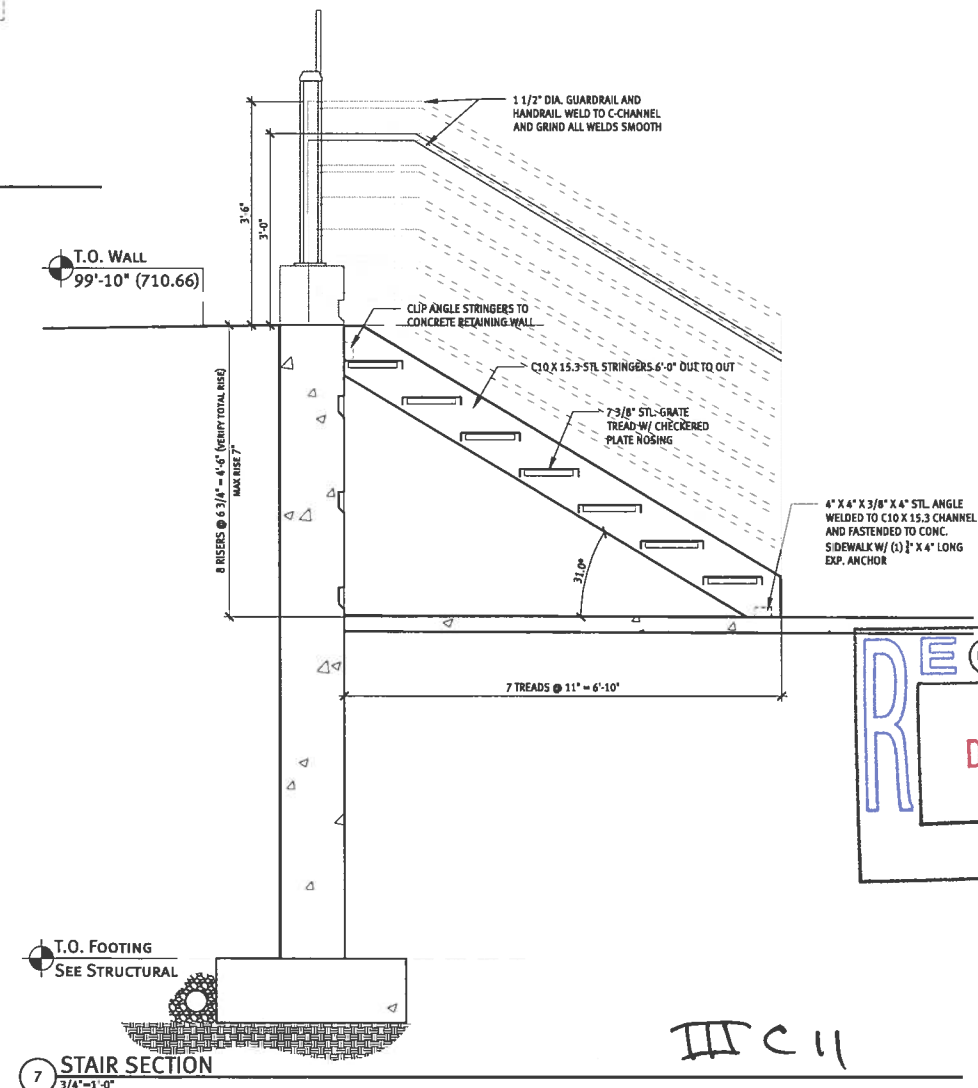
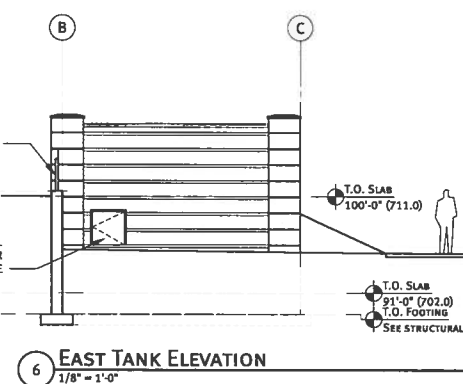
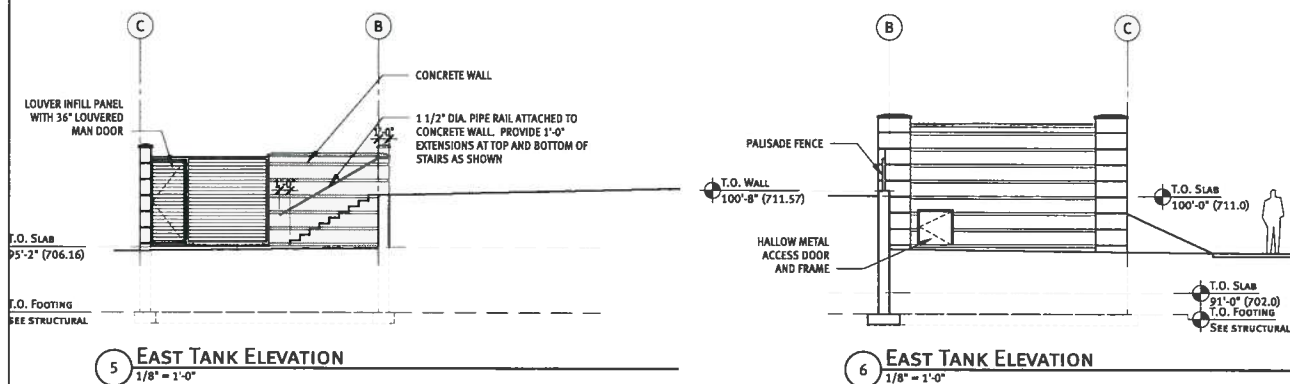
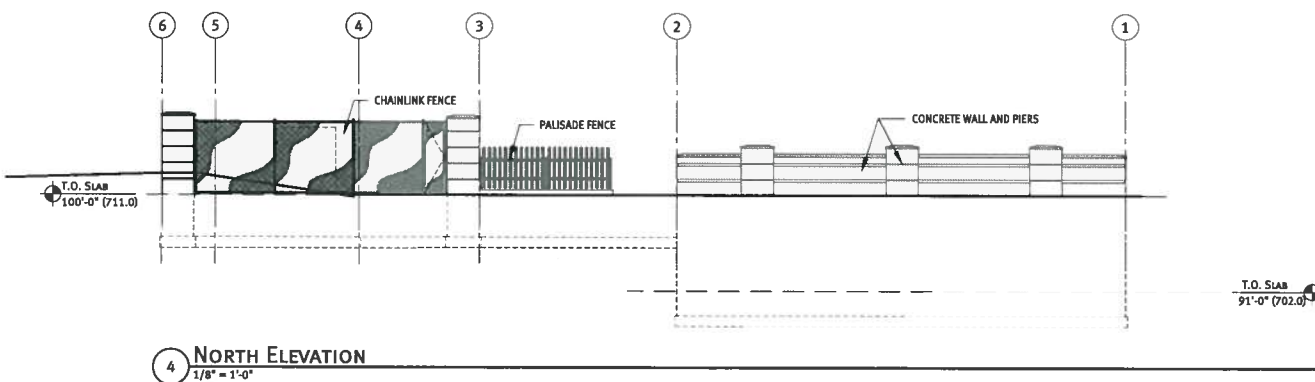
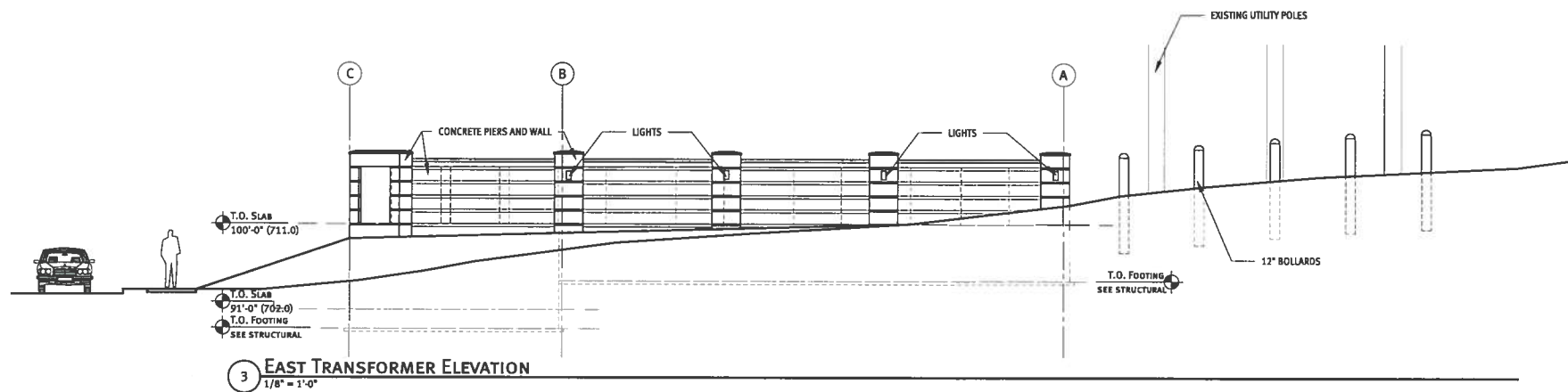
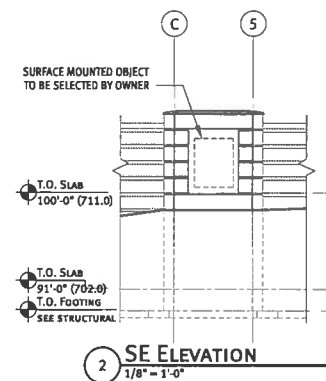
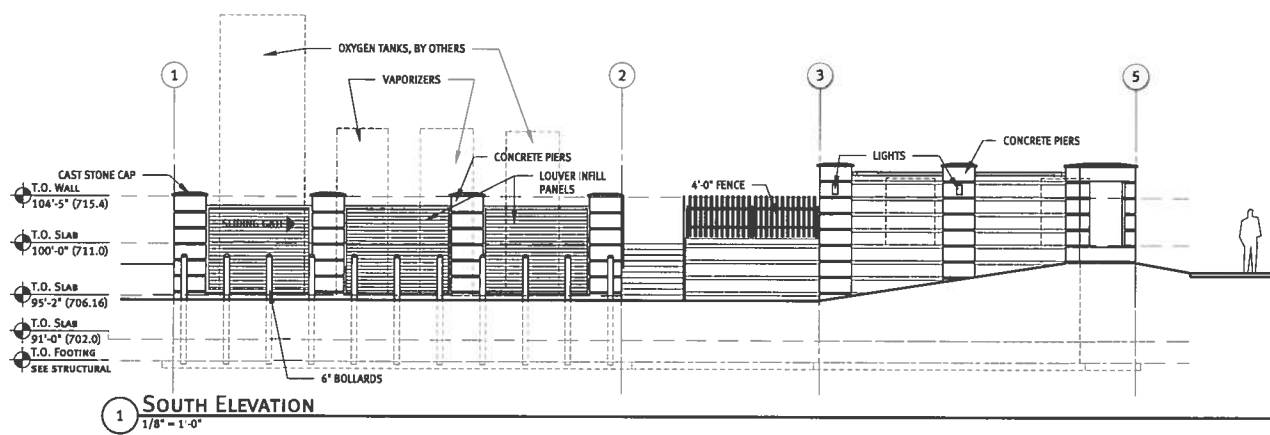
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PRELIMINARY NOT FOR
CONSTRUCTION
DECEMBER 3, 2010

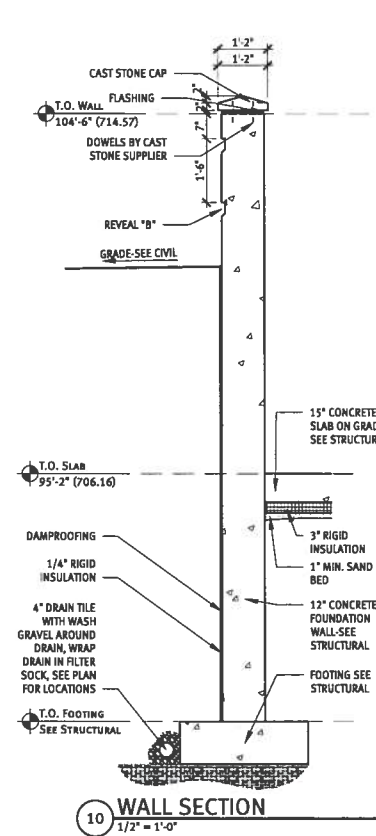
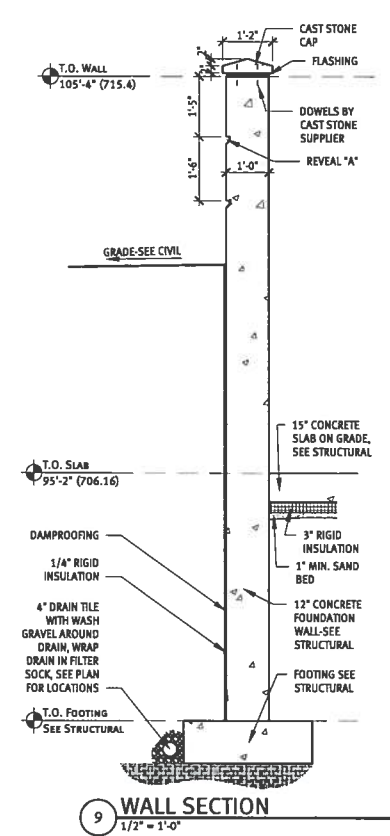
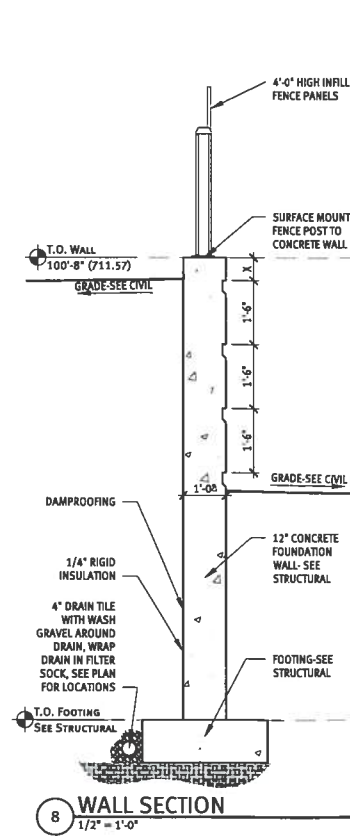
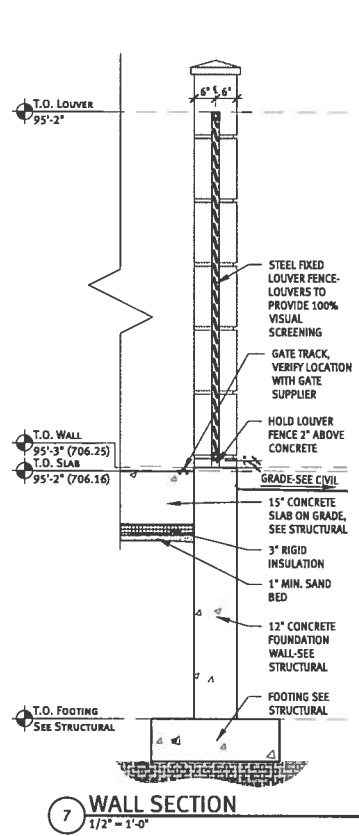
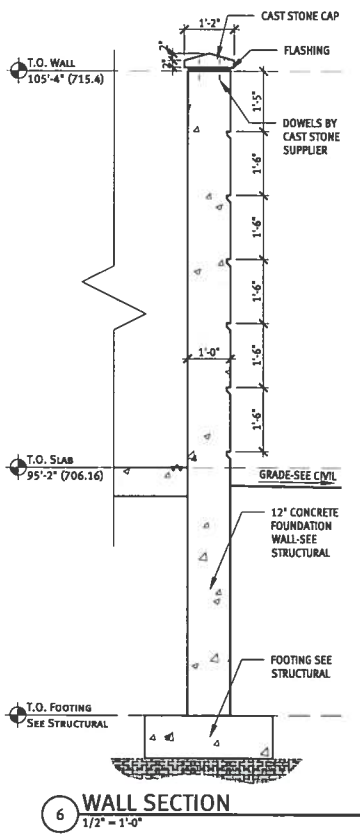
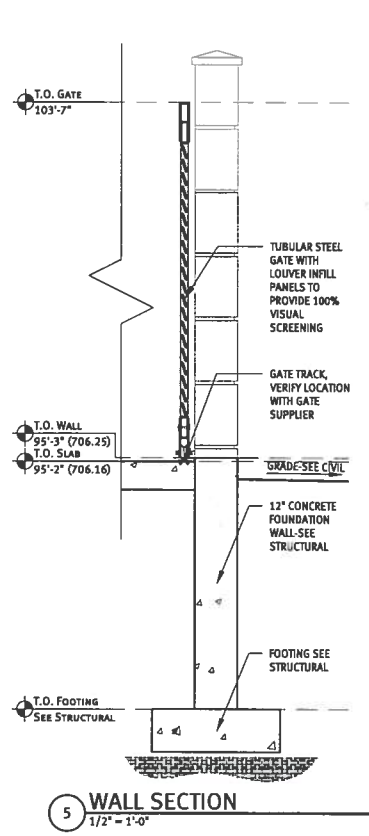
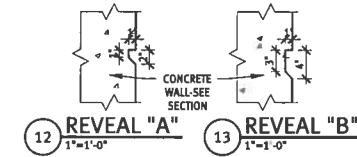
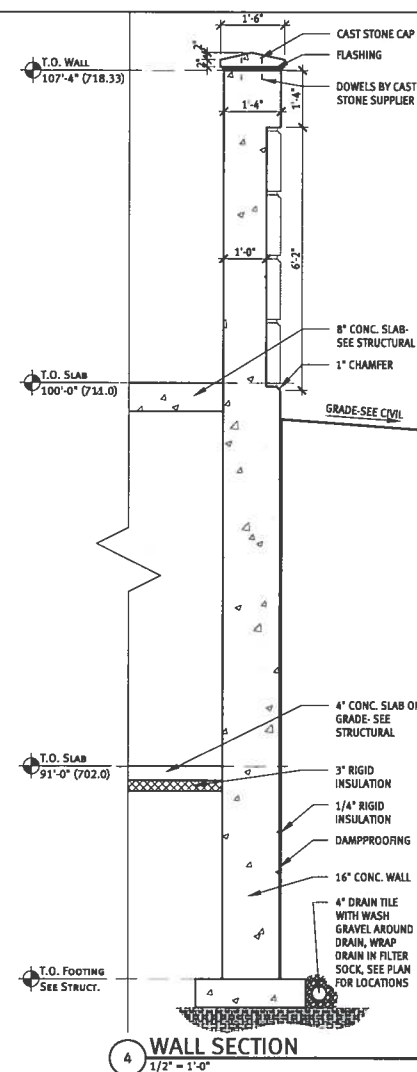
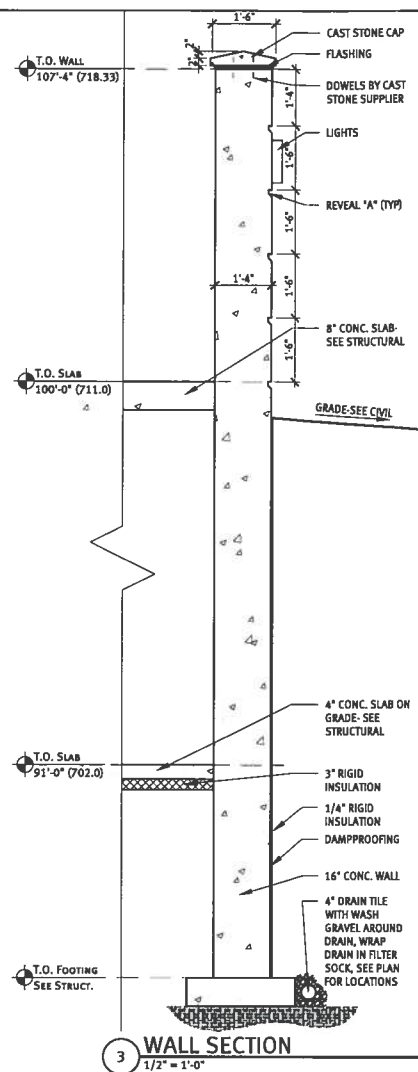
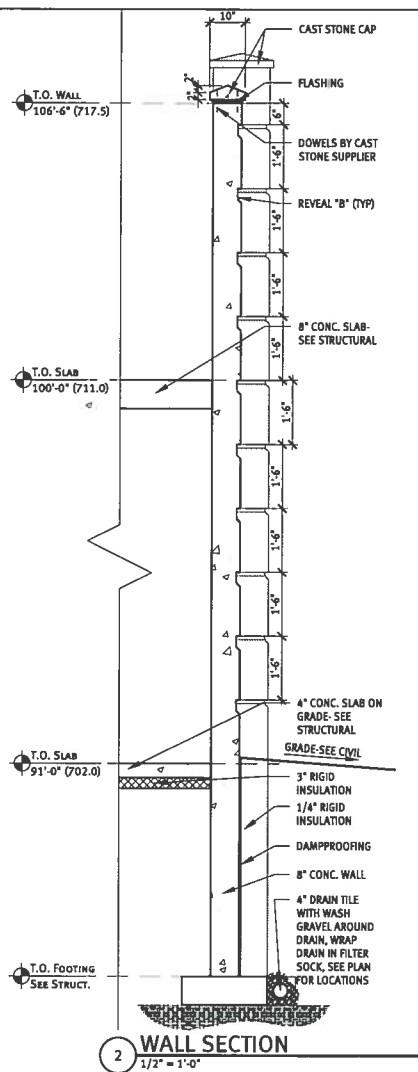
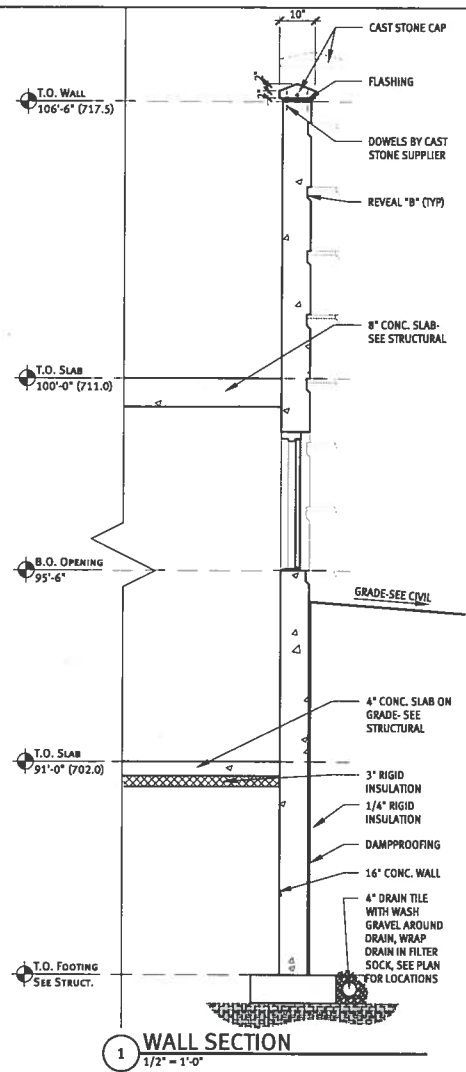
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PLOTTED BY: BRYAN C. ON DECEMBER 1, 2010 PROJECT: 010127.00 ST. LUKE'S HOSPITAL, OXYGEN AND UTILITIES RELOCATION SHEETS 010127.00 A3.0 SECTIONS AND DETAILS DWG



ST. LUKE'S HOSPITAL UTILITIES SERVICES RELOCATION

N 10TH AVE. AND E 2ND STREET
DULUTH, MN

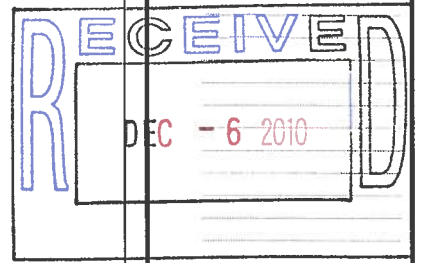
project # 010127.00
date DECEMBER 3, 2010
file name 010127.00-A3.0 SECTIONS
AND DETAILS
drawn by -
checked by -
name ---
reg. # ---
sign date DECEMBER 3, 2010

I hereby certify that this plan,
specification, or report was
prepared by me or under my
direct supervision and that I
am a duly Licensed Architect
under the laws of the State of
Minnesota.

signature

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DECEMBER 3, 2010

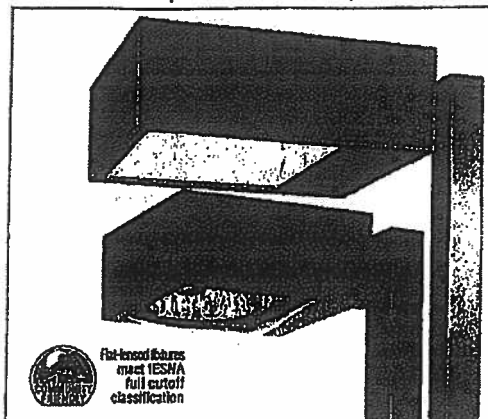
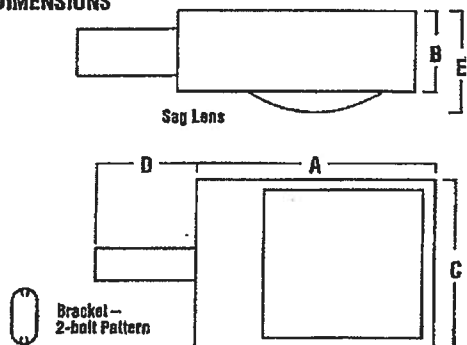
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SECTIONS AND
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A3.0

CITATION® (Various reflectors are protected by U.S. Patent No. 6,464,378.)

DIMENSIONS


	A	B	C	D	E
CT2V	511mm / 20-1/8"	203mm / 8"	371mm / 14-5/8"	152mm / 6"	286mm / 11-1/4"
CT2H	511mm / 20-1/8"	203mm / 8"	371mm / 14-5/8"	152mm / 6"	-
CTM	635mm / 25"	203mm / 8"	467mm / 18-3/8"	203mm / 8"	-
CTL	737mm / 29"	254mm / 10"	533mm / 21"	305mm / 12"	-

LUMINAIRE EPA CHART - Citation

	CT2V 152mm 6" bracket	CT2H 152mm 6" bracket	CTM 203mm 6" bracket	CTL 305mm 12" bracket
Single	1.5	1.4	2.2	3.2
D180°	3.0	2.8	4.0	6.4
D90°	2.4	2.2	3.9	5.1
T90°	3.9	3.6	6.1	8.3
TN120°	3.9	3.6	6.2	8.5
Q90°	4.7	4.4	7.8	10.2
Parallel (uses no arms)	2.4	2.2	3.9	5.1

Note: House Side Shield adds to fixture EPA. Consult factory.

SHIPPING WEIGHTS - Citation

Catalog Number	Est. Weight (kg/lbs.)	Length (mm/in.)	Width (mm/in.)	Height (mm/in.)
CT2H	14 / 30	546 / 21.5	394 / 15.5	288 / 11.25
CT2V	14 / 30	559 / 22	394 / 15.5	394 / 15.5
CTM	17 / 37	737 / 29	489 / 19.25	343 / 13.5
CTL	27 / 59	775 / 30.5	565 / 22.25	451 / 17.75

HOUSING - One-piece aluminum, available in small, medium, and large. Corners are welded and finished to produce a clean, sharp appearance while increasing housing strength and ensuring weather-tight construction.

DOOR FRAME - Aluminum, with two captive stainless steel door fasteners to provide secure closure and easy access with no loose hardware.

LENS/GASKET - Clear flat tempered glass lens (CT2H, CTM, CTL) and a contoured clear tempered glass lens (CT2V) are sealed to the lens frame with EPDM gasketing. The lens frame features a one-piece continuous gasket for maximum sealing to the housing.

SOCKETS - Porcelain mogul-base sockets. All sockets are pulse-rated.

LIGHT SOURCES - Pulse-Start Metal Halide, Pulse-Start Metal Halide Reduced Envelope, Ceramic Metal Halide, Metal Halide or High Pressure Sodium. Clear lamp is supplied as standard.

BALLASTS - High-power factor ballast. Pulse-Start Metal Halide, Metal Halide, and 250 watt and above High Pressure Sodium fixtures feature a CWA type ballast. 100 and 150 watt HPS fixtures feature HX-HPF ballast. All ballasts are designed for -20° F operation, and are mounted to the housing reinforcing plate.

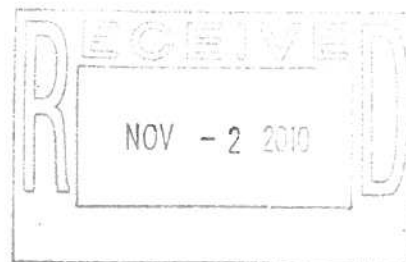
REFLECTORS/DISTRIBUTION PATTERNS

- Five multi-faceted reflector systems and distribution patterns are available with the Citation: Asymmetrical (A), Type III (3) medium distribution pattern for increased pole spacing, Forward Throw (FT), and Forward Perimeter (FP) for perimeter lighting applications to eliminate stray light and produce a sharp backside cutoff, and Type V (5), for an even symmetrical distribution pattern. A field-rotatable reflector, which provides flexibility in distribution patterns without moving the fixture, is available with the large 1000 Watt Forward Throw Citation only. Photometric data is tested in accordance with IESNA guidelines.

BRACKETS - A 2-1/2" x 5-3/8" x 6" aluminum bolt-on bracket is shipped standard with a small Citation (CT2H and CT2V). A 2-1/2" x 5-3/8" x 8" aluminum bolt-on bracket is shipped standard with a medium Citation (CTM). A 2-1/2" x 5-3/8" x 12" aluminum bolt-on bracket is shipped with a large Citation (CTL). A 6" bracket is available for CTL and CTM in single and D180° configurations. A round pole plate (RPP2) is required for mounting to 3"-5" round poles (See Accessory Ordering Information chart).

FINISHES - Each fixture is finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling, and is guaranteed for five full years. Standard colors include bronze, black, platinum plus, buff, white, satin verde green, metallic silver, and graphite.

PHOTOMETRICS - Please visit our web site at www.lsi-industries.com for detailed photometric data.



06/29/09

Project Name _____

Fixture Type _____

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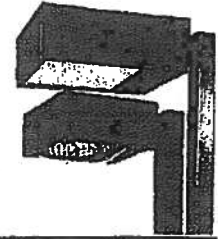
Catalog # _____

III C 13

CITATION®

LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: **CT2H 3 400 PSMHR F MT BRZ PCR**



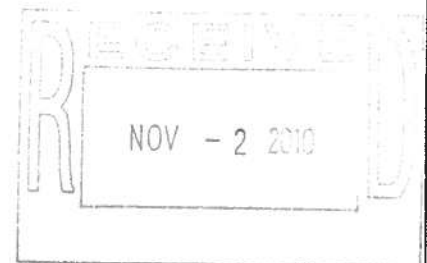
Luminaire Prefix	Distribution	Lamp Wattage	Light Source	Lens	Line Voltage	Luminaire Finish	Options
Vertical Burn CT2V - Small	FP - Forward Parimeter 5 - Type V	150 175 250 320 400	PSMV - Pulse-Start Metal Halide 175, 250, 320 Watt PSMVR - Pulse-Start Metal Halide Reduced Envelope 400 Watt CMH - Ceramic Metal Halide 150 Watt HPS - High Pressure Sodium 150 Watt	CT - Contoured Clear Impact-resistant Glass	480 MT - Multi Tap TT - Tri-Tap	BRZ - Bronze BLK - Black PLP - Platinum Plus BUF - Buff WHT - White SVG - Satin Verde Green GPT - Graphito MSV - Metallic Silver	6BK - 6" Bracket (CTL and CTM) 2 PCR - Photoelectric Control Receptacle 3 LL - Less Lamp
Horizontal Burn CT2H - Small	A - Asymmetrical 3 - Type III FT - Forward Throw 5 - Type V	100 150 175 250 320 400	PSMH - Pulse-Start Metal Halide 175, 250, 320 Watt PSMHR - Pulse-Start Metal Halide Reduced Envelope 400 Watt CMH - Ceramic Metal Halide 150 Watt HPS - High Pressure Sodium 100, 150, 250, 400 Watt	F - Flat Clear Tempered Glass	MT - Multi Tap consists of 120V, 208V, 240V and 277V and is prepared for highest voltage. Alternate voltages will require field adjustment. TT - Tri-Tap consists of 120V, 277V and 347V and is shipped standard for Canadian applications and is prepared for highest voltage. Alternate voltages will require field adjustment.		
Horizontal Burn CTM - Medium	A - Asymmetrical 3 - Type III FT - Forward Throw 5 - Type V	250 320 400	PSMH - Pulse-Start Metal Halide 250, 320, 400 Watt HPS - High Pressure Sodium 250, 400 Watt		Consult Factory for International Voltages and Light Sources		
Horizontal Burn CTL - Large	A - Asymmetrical 3 - Type III FT - Forward Throw 1	750 1000	PSMH - Pulse-Start Metal Halide 750, 1000 Watt MH - Metal Halide 1000 Watt HPS - High Pressure Sodium 1000 Watt				

FOOTNOTES:

- 1- CTL-FT - Forward Throw reflectors are field-rotatable.
- 2- A 6" bracket can only be ordered with single and D180° configurations - CTL and CTM.
- 3- PCR factory installed and prewired for highest voltage. Alternate voltages will require field re-wiring. Photocell must be ordered separately, see Accessories.

ACCESSORY ORDERING INFORMATION (Accessories are field installed)			
Description	Order Number	Description	Order Number
PG120 - Photocell	122514+	CTM HSS - House Side Shield	122520BLK++
PG208-277 - Photocell for 208V, 240V or 277V	122515+	CTL HSS RM - House Side Shield - Rear Mounted	122521BLK++
PG347 - Photocell	159516+	CTL HSS SM - House Side Shield - Side Mounted	239683BLK++
PG480 - Photocell	1225180+	GT2H PLS - Polycarbonate Shield	168702
FK120 - Single Fusing	FK120	CTM PLS - Polycarbonate Shield	122523
FK277 - Single Fusing	FK277	CTL PLS - Polycarbonate Shield	122524
DFK208, 240 - Double Fusing	DFK208, 240	RPP2 - Round Pole Plate	162914BLK++
DFK480 - Double Fusing	DFK480	BKS-BD-WM - CLR Wall Mount Plate	123111CLR
FK347 - Single Fusing	FK347		
CT2V HSS - House Side Shield	122519BLK++		
CT2H HSS - House Side Shield	122519BLK++		

+ Factory installed PCR option required.
++Black only



06/29/09

Project Name _____

Fixture Type _____

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LSI INDUSTRIES INC.

Catalog # _____

LSI
Industries
A Company with a Smart Vision

III C 14

Kyle Deming - Re: storm water review of St. Luke's oxygen and utility relocation

From: Tom Johnson
To: Eric Shaffer; Kyle Deming
Date: 12/6/2010 3:43 PM
Subject: Re: storm water review of St. Luke's oxygen and utility relocation

Kyle and I talked about the project, no preliminary design stormwater meeting has taken place, I have a LA and Civil plan sheet but no information regarding the existing and proposed stormwater treatment approach..... Additionally Bocht Engineering is past due on the submittal of Record Drawings on a previous project that are required/needed by the City, this matter needs resolution prior to conducting additional business.
Tom

>>> Eric Shaffer 12/6/2010 3:08 PM >>>

Kyle

To my knowledge we have not received the official report from Brian. So this can not be approved by us at this time.

Tom- have you received anything?

Eric

-----Original Message-----

From: Kyle Deming

To: Shaffer, Eric <eshaffer@duluthmn.gov>

To: Johnson, Tom <tajohnson@duluthmn.gov>

Sent: 12/6/2010 3:05:42 PM

Subject: storm water review of St. Luke's oxygen and utility relocation

Eric and Tom,

Has either of you, or Gary, reviewed the plan listed above located at 10th Ave. E. and 2nd street? Bryan Bocht prepared it and reviewed it with you at some point, according to the project lead. The design shows a 19-car parking lot and storm water treatment through a rain garden that discharges to the catchbasin in 2nd St. at 10th.

I need to write up a report on this ASAP and would appreciate some comments on storm water.

Thanks,

--Kyle

III c 15

[illegible]

III c 16